UNITED STATES PATENT APPLICATION

of

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for

STORAGE AND DISPENSING BAG FOR ELECTRICAL CORDS

TO THE COMMISSIONER OF PATENTS AND TRADEMARKS:

Your petitioner, Russell R. Fellows, citizen of the United States, whose residence and postal mailing address is 2155 North 640 East, North Logan, UT 84341, prays that letters patent may be granted to him as the inventor of a STORAGE AND DISPENSING BAG FOR ELECTRICAL CORDS as set forth in the following specification.

STORAGE AND DISPENSING BAG FOR ELECTRICAL CORDS

This application claims Priority to application no. 60/458,887 filed March 28, 2003 in the United States Patent and Trademark Office.

5 BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates generally to electrical cords. More particularly, the present invention relates to electrical cord storage and dispensing systems.

10 Related Art

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The storage and use of electrical cords can be frustrating and troublesome due to frequent knots and tangling. Attempts to devise better storage and removal methods to minimize knotting and tangling have brought mixed results. One example is the use of a flat device onto which the electrical cord is wound. Another is a mechanical device having a handle and a spindle for holding the electrical cord. When the handle is turned by a user, the electrical cord is wound onto it. In a final example, a user may tie the electrical cord in a series of knots that reduce the size of the cord and minimize tangling.

These prior attempts at a solution to the storage problem may be expensive to acquire and time consuming to use. It would be desirable to create a system for electrical cord storage that is cheap to manufacture, quick to implement, and that eliminates knotting and tangling issues.

SUMMARY OF THE INVENTION

A method and system for storing and releasing an electrical cord in a manner to avoid knotting and entanglement is disclosed. The method of storing the electrical cord may include positioning an elongate bag with an open end in an upward orientation, positioning one end of the electrical cord in a bottom portion of the bag, feeding the electrical cord along sequential lengths into an interior portion of the bag until the electrical cord is substantially contained within the bag, and leaving a free end of the electrical cord positioned near the open end of the bag.

The method of removing an electrical cord from a containment bag may include restraining a free end of the electrical cord, tossing the bag containing the electrical cord along a direction suitable for coupling to a power source to unravel the electrical cord while retaining the free end at the user location.

Additional features and advantages of the invention will be apparent from the detailed description which follows, taken in conjunction with the accompanying drawings, which together illustrate, by way of example, features of the invention.

5 BRIEF DESCRIPTION OF THE DRAWINGS

- FIG. 1 is a flow chart of a method of storing an electrical cord in a manner to avoid knotting and entanglement in accordance with an embodiment of the present invention;
- FIG. 2 is a flow chart of a method for removing an electrical cord from a containment bag in accordance with an embodiment of the present invention; and
- FIG. 3 is a perspective view of an electrical cord storage bag system in accordance with an embodiment of the present invention.

DETAILED DESCRIPTION

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Reference will now be made to the exemplary embodiments illustrated in the drawings, and specific language will be used herein to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended. Alterations and further modifications of the inventive features illustrated herein, and additional applications of the principles of the inventions as illustrated herein, which would occur to one skilled in the relevant art and having possession of this disclosure, are to be considered within the scope of the invention.

As shown in FIG. 1, one example embodiment of the present invention may be described as a method 10 for storing an electrical cord in a manner to avoid knotting and entanglement. This method 10 may comprise the steps of positioning an elongate bag with an open end in an upward orientation 12, positioning one end of the electrical cord in a bottom portion of the bag 14, feeding the electrical cord along sequential lengths into an interior portion of the bag until the electrical cord is substantially contained within the bag 16, and leaving a free end of the electrical cord positioned near the open end of the bag 18. The bag is maintained in enough of an upward orientation in step 12 to prevent the electrical cord from sliding out.

As shown in FIG. 2, an example embodiment of the present invention may be described as a method 20 for removing an electrical cord from a containment bag. This method 20 may comprise the steps of grasping or otherwise restraining a free end of the electrical cord 22, tossing the bag containing the electrical cord along a direction suitable for coupling to a power load or source to unravel and sequentially release progressive lengths of

the electrical cord while restraining the free end in the hand 24 or by some other holding means such as a foot or heavy object, once unraveled, the cord can be coupled at one end to a receptacle 26, or at the other end to a power load such as a drill, power hammer, or other electrical device.

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As shown in FIG. 3, the present invention may also be embodied as an electrical cord storage bag system 30. Although this system is described as an electrical cord storage bag, it is understood that various types of cords fall within its scope, such as video, audio, or any other type of cord known to one skilled in the art. The electrical cord storage bag system 30 may include a bag 32 with a base end 34 and an open end 36, and an electrical cord 38 located within the bag. The bag may be constructed of any material known to one skilled in the art, such as but not limited to, plastic, leather, fabric, nylon, neoprene or canvas. The electrical cord may have a first end 40 and a second end 42, the first end 40 being positioned and restrained at the base end 34 of the bag 32, and the second end 42 extending towards the open end 36. The open end 36 should be sufficiently large to allow the user to easily feed the cord length sequentially into the interior, and to allow progressive release of the cord during flight of the bag. It is contemplated that the first end 40 can be either the female receptacle or the male receptacle of the electrical cord 38.

The bag 32 may also include a second opening 44 at the base end 34 of the bag 32, wherein the first end 40 of the electrical cord 38 protrudes through the second opening 44 to an area outside the bag 32. The first end 40 may be secured 43 to the second opening 44. This may be accomplished by any means known to one skilled in the art, examples of which are, but are not limited to, zippers, Velcro, hooks, snaps, clasps or buttons. Additional embodiments are contemplated whereby both the first end 40 and the second end 42 protrude from the open end 36 of the bag 32, provided a portion of the cord near the first end is secured at the base of the bag. A weight 46 may also be disposed at the base end 34 to assist the bag 32 to remain in an upward position, as well as assisting in deployment trajectory when thrown. Finally, a strap 48 may be coupled to the bag 32 to facilitate carrying.

As an example of use, the user may carry the bag 32 containing the electrical cord 38 with the male end protruding from the open end 36 to a power outlet. The user may then hold the male end with a free hand and throw the bag 32 in a direction towards the desired area of use, thus removing the electrical cord 38. The user may then insert the male end of the electrical cord 38 into the power outlet and walk to the desired area of use, where the female end is secured to a drill, hammer or other electric device. When the user is finished with the electrical cord 38, the user may then feed successive lengths of the electrical cord 38 into the

bag 32 until it is substantially enclosed therein. Alternatively, if the female end is the end that is protruding from the open end of the bag 32, the user may walk to the area of desired use and throw the bag 32 in a direction toward the power outlet while holding the female end with a free hand. Alternatively, the user may grasp the free end 42 and position the bag at either location, and walk away from the opening 36, unraveling the cord from within the bag as the cord progressively feeds through the opening.

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By way of example, the present invention may be described as a method for storing an electrical cord in a manner to avoid knotting and entanglement. The steps of the method may include positioning an elongate bag with an open end in an upward orientation, and positioning one end of the electrical cord in a bottom portion of the bag. Ideally, this end should be secured to the bag so that the collective cord bundle does not separate from the bag during flight when the bag has been thrown. By retaining the cord bundle within the bag, the progressively raveled configuration of the cord is undisturbed. The development of the progressively raveled configuration of the cord as shown in FIG. 3 is accomplished by the simple process of inserting the cord within the bag in a sequential manner along the length of the cord. This is in contrast to pushing two separated sections of cord into the bag at the same time, causing a higher likelihood of entanglement. This process of feeding the electrical cord along sequential lengths into an interior portion of the bag continues until the electrical cord is substantially contained within the bag in a sequential ordered configuration 38, leaving a free end 42 of an electrical cord positioned near the open end of the bag.

As another example, the present invention may be further described as a method for removing an electrical cord from a containment bag. The steps of the method may include grasping a free end of the electrical cord in one hand, tossing the bag containing the electrical cord along a direction suitable for coupling to a power source to unravel the electrical cord while retaining the free end in the hand. The male end of the electrical cord may then be coupled to a female receptacle. Obviously, the reverse configuration could also be applied.

As yet another example, the present invention may be described as an electrical cord storage bag system. The system may include a bag with a base end and an open end. An electrical cord that has a first end and a second end is located within the bag. The first end of the electrical cord may be positioned at the base of the bag with the cord inserted in the bag by the described process of sequential feeding. The second end of the electrical cord may be freely accessed as it extends towards the open end of the bag.

The bag may also include a second opening at the base end, wherein the first end of the electrical cord protrudes through the second opening to an area outside the bag. The first end of the electrical cord may be secured to the second opening by a securing means. This allows the user to position either end of the cord at this location, providing ready access to couple both ends to each other or to other receptacles while the cord remains fully bundled in the bag. This securing means may be any means to secure the first end to the second opening that is known to one skilled in the art, examples of which include but are not limited to a zipper, hook and loop material, a hook, a snap, a clasp or a button. Alternatively, a securing tab or device 50 may be positioned within the bag to perform the function of securing the end of the cord to the bag so that the cord bundle is not prematurely released during flight or use. Additionally, the bag may include a weight 46 coupled to the base end of the bag to assist the bag to remain in an upward position. The bag may also include a strap 48 coupled to the bag to facilitate carrying the bag. Finally, an exterior pocket 52 may be coupled to the bag for the storage of miscellaneous connection devices.

It is to be understood that the above-referenced arrangements are illustrative of the application for the principles of the present invention. Numerous modifications and alternative arrangements can be devised without departing from the spirit and scope of the present invention while the present invention has been shown in the drawings and described above in connection with the exemplary embodiments(s) of the invention. It will be apparent to those of ordinary skill in the art that numerous modifications can be made without departing from the principles and concepts of the invention as set forth in the claims.